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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/275,934	03/24/1999	MARK WILLIAM JANOSKA	1400.4100209	1410

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EXAMINER

HOANG, THAI D

ART UNIT PAPER NUMBER

2616

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/275,934

Applicant(s)

JANOSKA ET AL.

Examiner

Thai D. Hoang

Art Unit

2668

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 10/24/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-28 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8 and 11-21 is/are rejected.
- 7) ☒ Claim(s) 6, 9, 10, 22 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



HANH NGUYEN
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 18 is rejected under 35 U.S.C. 102(e) as being unpatenable over Sakamoto, U.S. patent No. 6,075,767.

Regarding claim 18, Sakamoto discloses a system having a redundant architecture for switchover to a line interface. Sakamoto discloses that the system comprises a switch core (2), wherein the switch core has a plurality of inputs and a plurality of outputs, wherein the switch core passes data received on the plurality of inputs to the plurality of outputs based on routing tags (figs. 1-5, col. 1, lines 13-17; col. 2, lines 19-22; col. 9, lines 8-11; col.13, lines 4-6); and a plurality of line card managers (selector card 3) operably coupled to the switch core (2) and adapted to couple to a plurality of line card pairs (1-1 and 1-2), wherein each line card manager includes an

arbiter (MPU 28) that couples to a first line card and a second line card of a line card pair, wherein each line card manager couples to a different line card pair, wherein each arbiter is operably coupled to a corresponding input of the plurality of inputs of the switch core, wherein the arbiter provides ingress data from one of the first and second line cards to the corresponding input to the switch core based on selection information (figures 1, 4-5 and 17; col. 7, line 40 - col. 8, line 67.)

Furthermore, Sakamoto discloses each selector card 3 couples to a respective output port of the switch core 2, wherein the data received from the output port of the switch is forwarded to the first line card 1.1 and/or second line card 1.2 based on a routing information of the received data (figures 1, 4-5 and 17). Sakamoto discloses that the first and second line cards (1-1 and 1-2) comprise a routing function (col. 2, lines 20-22; col. 9, lines 8-11; col. 12, lines 50-55; col.13, lines 4-6), which provides egress data from the corresponding output to the first and second line cards (1.1 and 1.2) based on routing information included in the egress data (fig. 3, col. 2, lines 23-25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7-8, 11-17 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakamoto, U.S patent No. 6,075,767.

Regarding claims 1 and 15, Sakamoto discloses a system having a redundant architecture for switchover to a line interface. Sakamoto discloses that the system comprises a switch core (2), wherein the switch core has a plurality of inputs and a plurality of outputs, wherein the switch core passes data received on the plurality of inputs to the plurality of outputs based on routing tags (figs. 1-5, col. 1, lines 13-17; col. 2, lines 19-22; col. 9, lines 8-11; col.13, lines 4-6); and a plurality of line card managers (selector card 3) operably coupled to the switch core (2) and adapted to couple to a plurality of line card pairs (1-1 and 1-2), wherein each line card manager includes an arbiter (MPU 28) that couples to a first line card and a second line card of a line card pair, wherein each line card manager couples to a different line card pair, wherein each arbiter is operably coupled to a corresponding input of the plurality of inputs of the switch core, wherein the arbiter provides ingress data from one of the first and second line cards to the corresponding input to the switch core based on selection information (figures 1, 4-5 and 17; col. 7, line 40 - col. 8, line 67.)

Furthermore, Sakamoto discloses each selector card 3 couples to a respective output port of the switch core 2, wherein the data received from the output port of the switch is forwarded to the first line card 1.1 and/or second line card 1.2 based on a routing information of the received data (figures 1, 4-5 and 17). Sakamoto does not explicitly disclose that the line card manager (3) includes a router. However, Sakamoto discloses that the first and second line cards (1-1 and 1-2) comprise a routing function (col. 2, lines 20-22; col. 9, lines 8-11; col. 12, lines 50-55; col.13, lines 4-6), which provides egress data from the corresponding output to the first and second line cards

(1.1 and 1.2) based on routing information included in the egress data (fig. 3, col. 2, lines 23-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the routing function in the system disclosed by Sakamoto into the line card manager in order to simplify the structure and reduce the cost of the system.

Regarding claims 2, 3, 16 and 19, Sakamoto does not disclose that each line card manager further comprises buffering circuitry operably coupled to the arbiter, wherein the buffering circuitry buffers ingress data from the first and second line cards, wherein the arbiter provides ingress data from the buffering circuitry to the switch core based on the selection information. However, buffers are used in most of telecommunications systems for controlling data flow. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a buffer into the system disclosed by Sakamoto in order to control data flow in the system.

Regarding claims 4 and 17, Sakamoto discloses that the selection information determines an active line card and an inactive line card of the line card pair, wherein the arbiter preferentially passes active line card data over inactive line card data (col. 8, lines 9-67.)

Regarding claims 5 and 21, Sakamoto discloses that the redundant line card becomes active line card when a defect or failure is detected in the active line card (col. 1, lines 48-52; col. 2, lines 27-33; col. 7, line 62 – col. 8, line 8.). Sakamoto does not disclose an idle state is used to detect a failure. However, the method of detecting a failure when an idle state (or idle cells) is detected is well known in the art. It would have

been obvious to one of ordinary skill in the art at the time the invention was made to apply idle states into Sakamoto's system in order to improve quality of service because avoiding data lost in the system.

Regarding claims 7 and 20, Sakamoto does not explicitly disclose each line card manager further comprises filters, which pass selected data types and reject other data types. However, the method of using filters for passing only selected data types is well known in the art and applied in conventional communication systems. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add filters into the Sakamoto's system to insure only selected data is passed through switch core.

Regarding claim 8, Sakamoto discloses that the register (27) that determines the selected data types.

Regarding claim 11, the system disclosed by Sakamoto comprises a NxN switch core and the plurality of line cards includes 2N line cards (figures 1-4 and 17.)

Regarding claims 12-14, Sakamoto discloses that the system comprises an ATM switch; therefore, it is used in a cell based network.

Allowable Subject Matter

Claims 6, 9-10 and 22-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 24-28 are allowed for reasons given in the previous office actions.

Response to Arguments

Applicant's arguments filed 10/24/2005 have been fully considered but they are not persuasive.

Regarding claim 18, page 13 of the remarks, Applicant argues, "Examiner has failed to justify a rejection of claim 18 under 35 U.S.C. §102(e)." Examiner apologizes for the mistake when combining claim 18 with claims 1 and 15 for response. Since it was in the "Response to Arguments" portion of the previous office action; therefore, it does not affect to the rejection of the claim 18 under 35 U.S.C. §102(e) set forth in the previous office action.

Page 14 of the remarks, in response to applicant's argument that there is no reason to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Also, page 14 of the remarks, Applicant argues the Examiner fails to cite any evidence to support how "...the same buffers..." can be "...added to both line cards..." and how "...the propagation delays in both line cards are the same." Examiner believes that Applicant, as one of ordinary skill in the art, could be able to understand. Further, the office action is not a technical course for describing.

Regarding claims 5 and 21, page 15 of the remarks, Applicant requests to provide evidence. Examiner cites a new reference, US Patent No. 5,706,277 (col. 5, lines 7-18, and col. 6, lines 57-60), wherein the reference discloses the standby link 22 is activated based on an idle state in operating link 21.

Regarding claims 7-8 and 20, page 15 of the remarks, Applicant requests to provide evidence. Examiner cites a new reference, US Patent No. US 6,617,879 B1, wherein the reference teaches the features of the claims, col. 26, lines 30-41,

Conclusion

The following references are cited to further show the state of the art with respect to the application:

US Patent No. 5,706,277, Klink, "Method for changing-over to standby for a transmission device for the bidirectional transmission of digital signals and arrangement for carrying out the method."

US Patent No. 6,617,879 B1, Chung, "Transparently partitioned communication bus for multi-port bridge for a local area network."

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2668

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D. Hoang whose telephone number is (571) 272-3184. The examiner can normally be reached on Monday-Friday 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571) 272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thai Hoang



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PRIMARY EXAMINER